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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,275	04/22/2004	Kazuaki Suzuki	4276-0110P	6464
2292	7590	01/16/2008		
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER WENDELL, MARK R	
			ART UNIT	PAPER NUMBER
			3635	
			NOTIFICATION DATE	DELIVERY MODE
			01/16/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/829,275

Applicant(s)

SUZUKI ET AL.

Examiner

Mark R. Wendell

Art Unit

3635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1-32 have been considered but are moot in view of the new grounds of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Houghton (US 5660017) in view of Fouse (US 3458647). Regarding claims 1, 5, 13, and 17 Houghton illustrates in Figure 6 a joint structure comprising:

- A building (Figure 1, item 10) with at least one structural member (17);
- A gusset plate (25 or 26) having first and second opposed faces; and
- A plurality of splice plates (20, 34, 35, 40) connected to said gusset plate (25 or 26), each of said plurality of splice plates having a non- rectangular cross-section, at least one of said plurality of splice plates having a face in direct contact with the first opposed face of said gusset plate and at least another of

said plurality of splice plates having a face in direct contact with the second opposed face of said gusset plate.

However, Houghton does not distinctly teach the splice plate being constructed from section steel. Fouse in Column 3, line 44, discloses splice plates being made from steel. It would have been obvious to one having ordinary skill in the art at the time of invention to fabricate the splice plate within the structure of Houghton from steel as suggested in Fouse for added strength and anti-buckling purposes.

Regarding claims 2 and 14, Houghton illustrates in Figure 6 the gusset plate (25 or 26) is connectable to a first structural member (17) and said at plurality of splice plates (34, 35) is connectable to a second structural member (30).

Regarding claims 3 and 15, Houghton illustrates in Figure 6 the gusset plate (25) connected to said plurality of splice plates (20, 34, 35, 40) is a first gusset plate, said first gusset plate being connectable (via 17) to a second gusset plate (26).

Regarding claims 4 and 16, Houghton illustrates said first gusset plate (25) is a vertical gusset plate and said second gusset plate (26) is a horizontal gusset plate (the gusset plates are both square-shaped, therefore they are both vertical and horizontal), said horizontal gusset plate being connected to at a least one additional splice plate (20) constructed from section steel (see explanation above) having a non-rectangular cross-section (cross section taken diagonally).

Regarding claims 6 and 18, the phrase "formed off site...plate" renders the claim a product by process claim and therefore is given no patentable weight. MPEP 2113 states, "even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process."

Regarding claims 7 and 19, Houghton illustrates in Figure 6 the gusset plate including a rib (32) connected to at least one of a top edge and a vertical upright edge thereof (also see Figure 3).

Regarding claims 8 and 20, Houghton illustrates in Figure 6 said gusset plate including a first joining plate (27, top) connected to a first edge thereof and a second joining plate (27, bottom) connected to a second edge thereof, and at least one of said plurality of splice plates (20) extends toward a corner (top, left) of the gusset plate beyond a yield line (starting in the top right of 27 top and extending in a straight line to bottom left of 27 bottom) of the gusset plate, said yield line being formed by a diagonal line extending from an edge of the first joining plate to an edge of the second joining plate.

Regarding claims 9 and 21, Houghton illustrates in Figure 6 the gusset plate (25) including said first and second opposed faces and first and second ends, said first and

second ends being connected by an end edge, and said first and second ends have a rib (27) connected thereto and said first and second opposed faces having no stiffening ribs connected thereto. The examiner notes that splice plate 40 could also be considered a stiffening rib; however the item is referenced in the drawing by a dotted / faded line indicating it is optional, therefore does not have to be attached to the face.

Regarding claims 10 and 22, Houghton illustrates in Figure 6 the gusset plate (25) including said first and second opposed faces, a first joining plate (28 top) connected to a first edge thereof and a second joining plate (28 bottom) connected to a second edge thereof, each of said first and second opposed faces having a stiffening rib (27, 40) connected thereto, and said stiffening ribs do not extend beyond a yield line of the gusset plate (it is described above what the yield line is, and the stiffening ribs (27, 40) do not extend past it).

Regarding claims 11 and 23, Houghton illustrates in Figure 6 said gusset plate including first and second ends, said first and second ends being connected by an end edge and having a stiffening rib (27) connected thereto.

Regarding claims 12 and 24, Houghton in view of Fouse discloses the claimed invention except for the omission of stiffening ribs connected to the first and second face of the gusset plate. It would have been obvious to one having ordinary skill in the art at the time the invention was made to omit the stiffening rib, since it has been held that

omission of an element and its function in a combination where the remaining elements perform the same functions as before involves only routine skill in the art (In re Karlson, 126 USPQ 184).

Regarding claims 25, 27-32, given the structure of Houghton in view of Fouse as outlined above, the method of assembling the joint structure within a building would be obvious to one having ordinary skill in the art.

Regarding claim 26, Houghton does disclose welding certain parts together to assemble the joint structure, however never discloses any **on site** welding. It is conceivable that the joint structure could be prefabricated and brought to the site.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark R. Wendell whose telephone number is (571) 270-3245. The examiner can normally be reached on Mon-Fri, 7:30AM-5PM, Alt. Fri off, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on (571) 272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Richard Chilcot
Supervisory Patent Examiner
Art Unit 3635

MRW
December 27, 2007